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EXPANSE NETWORKS, INC. 6206 KELLERS CHURCH ROAD PIPERSVILLE, PA 18947			SHELEHEDA, JAMES R	
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			2614	7

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/516,983

Applicant(s)

ELDERING ET AL.

Examiner

James Sheleheda

Art Unit

2614

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-52 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-52 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 4.6.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Priority

1. The examiner has reviewed application 09/204,888 and has determined that claims 1-52 in the instant application have a filing date of 03/01/00.

Claim Objections

2. Claims 26 and 35 are objected to because of the following informalities:

In claim 26, line 3, "user" should be changed to --subscriber household--.

In claim 35, line 4, "the subscriber household" should be changed to --a subscriber household--.

In claim 17, line 1, "claim 17" should be changed to --claim 16--.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 4, 6-9, 11-15, 21, 22, 24, 25, 29, 36, 39, 40, 41 and 43-47 are rejected under 35 U.S.C. 102(b) as being anticipated by Maissel et al. (Maissel) (WO 99/01984).

As to claim 1, Maissel discloses a method for generating a subscriber profile for a subscribed user of television or multimedia programming (page 4, lines 7-12) the method comprising:

monitoring user view activities (page 25, lines 4-13);

collecting raw subscriber selection data based on source material selected by the user (page 25, lines 26-30 and page 26, lines 6-7) over a predetermined period of time (page 18, lines 23-30);

evaluating the raw subscriber selection data to filter out irrelevant data and generate a record of actual subscriber selection data (by ignoring programming watched less than a certain duration; page 26, lines 17-30); and

processing the actual subscriber selection data to create a subscriber profile (page 26, lines 8-16).

As to claim 40, Maissel discloses a data processing system for generating a subscriber profile for a subscribed user of television programming, the data processing system comprising:

computer processor means (microprocessors) for processing data (page 24, lines 19-23);

storage means (Fig. 2, profile storage unit 140 or Fig. 8a, profile storage unit 370) for storing data on a storage medium (page 18, lines 23-27);

a first computer means (Fig. 3; viewing information and analysis apparatus, 170; page 15, lines 29-31, page 16, lines 1-8 and page 14, lines 6-7) for monitoring

subscriber activity (page 25, lines 4-13) and creating a record of raw subscriber selection data wherein the raw subscriber selection data corresponding to the source material selected by the subscriber (page 25, lines 26-30 and page 26, lines 6-7);

filtering means for evaluating the raw subscriber selection data and filtering out the selection data associated with irrelevant activities (by ignoring programming watched less than a certain duration; page 26, lines 17-30) and for creating a record of actual subscriber data (new profile information which is added to a profile; page 26, lines 17-30 and page 23, lines 30-31 and page 24, lines 1-11);

a second computer means (intelligent agent, 130; page 15, lines 29-31, page 16, lines 1-8 and page 14, lines 6-7) for retrieving source related information (program characteristics) wherein the source related information contains descriptive fields corresponding to the actual subscriber selection data (page 18, lines 18-27); and

a third computer means (intelligent agent, 130; page 15, lines 29-31, page 16, lines 1-8 and page 14, lines 6-7) for processing the actual subscriber selection data with respect to the descriptive fields to form a subscriber profile (page 26, lines 8-16).

As to claim 4, Maissel discloses wherein said monitoring comprises monitoring channel change commands initiated by the subscriber (page 25, lines 4-8).

As to claim 6, Maissel discloses wherein said collecting comprises extracting source related text from the source material (page 16, lines 24-31, page 17, lines 1-16 and page 18, lines 18-30).

As to claim 7, Maissel discloses wherein the source related text includes one or more descriptive fields (page 16, lines 24-31, page 17, lines 1-16 and page 18, lines 18-30).

As to claim 8, Maissel discloses wherein the source related text is extracted from an electronic program guide of the source material (page 18, lines 18-30).

As to claim 9, Maissel discloses wherein the source related text is extracted from one or more HTML files related to the source material (page 18, lines 18-30 and page 23, lines 9-15 and line 17-19).

As to claims 11 and 41, Maissel discloses wherein said collecting (or means for monitoring subscriber activity) further comprises monitoring time durations corresponding to viewing times of selected source material (page 26, lines 17-30).

As to claim 12, Maissel discloses wherein said evaluating comprises evaluating channel change commands and associated viewing times (page 26, lines 17-30).

As to claim 13, Maissel discloses filtering out any channel change commands if the associated viewing times are below a pre-determined threshold (page 26, lines 23-30).

As to claim 14, Maissel discloses wherein the filtered out channel change commands correspond to channel surfing activities (page 26, lines 17-30).

As to claims 15 and 46, Maissel discloses wherein the filtered out channel change commands correspond to channel jumping activities ("surfing", page 26, lines 23-30) (wherein "channel jumping" is defined by applicant as programming viewed for a very brief time; see applicant's disclosure at page 18, lines 19-27).

As to claim 47, Maissel discloses wherein the channel jumping activities are recognized by recognizing the channel change commands issued by the subscriber (page 25, lines 4-8) and then evaluating the associated channel numbers (viewed program; page 26, lines 17-21) and viewing times (page 26, lines 23-30).

As to claims 21 and 43, Maissel discloses wherein said processing further comprises processing subscriber selection data based on a pre-determined set of heuristic rules (page 20, lines 1-18).

As to claim 22, Maissel discloses wherein the heuristic rules are described in logical forms (conditional rules; page 20, lines 12-18).

As to claim 24, Maissel discloses wherein the subscriber profile is a profile based on the user interests (program preferences; page 18, lines 18-30 and page 19, lines 1-8).

As to claim 25, Maissel discloses wherein the subscriber belongs to a household (more than one viewer preference profile; page 18, lines 9-17 and page 20, lines 19-27) and the subscriber profile is a profile based on the interests (program preferences; page 18, lines 18-30 and page 19, lines 1-8) of the user household (combined profile; page 18, lines 9-17 and page 20, lines 19-27).

As to claim 29, Maissel discloses wherein the subscriber profile is a program preference profile for the subscriber (page 18, lines 18-30 and page 19, lines 1-8), the program preference profile indicating the type of programming of interest to the subscriber (page 18, lines 18-30 and page 19, lines 1-8).

As to claim 36, Maissel discloses wherein the subscriber profile is controlled by the subscriber (page 19, lines 9-18).

As to claim 39, Maissel discloses analyzing the subscriber profile to estimate user-viewing habits (such as a desire to channel surf; page 27, lines 6-9).

As to claim 44, Maissel discloses wherein the means for evaluating filters out the selection data associated with channel surfing activities (page 26, lines 17-30).

As to claim 45, Maissel discloses wherein the channel surfing activities are recognized by recognizing the channel change commands issued by the subscriber (page 25, lines 4-8 and page 26, lines 17-21) and then evaluating the associated viewing times (page 26, lines 17-30).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Maissel, in view of Hendricks et al. (Hendricks) (5,682,195) and Krause et al. (Krause) (5,926,205).

As to claim 2, while Maissel discloses wherein the source material corresponds to digital video (wherein the EPG follows the digital video broadcasting standard; page 16, lines 24-29 and page 17, lines 11-16), Hypertext Markup Language material (page 18, lines 18-30 and page 23, lines 9-15 and line 17-19) and other multimedia source material (page 23, lines 9-23), he fails to specifically disclose wherein the source material corresponds to analog video and Motion Picture Expert Group (MPEG).

In an analogous, Hendricks discloses a cable headend (Fig. 6c) which provides signals in analog format to subscribers (column 14, lines 20-29) for the benefit of utilizing existing analog set top terminals (column 14, lines 20-29).

Additionally, in an analogous art, Krause discloses a video system for transmitting video (column 3, lines 6-10) wherein MPEG is utilized (column 7, lines 60-65) for the typical benefit of compressing the material for playback and storage (column 7, lines 57-65 and column 8, lines 2-5).

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Maissel's system to include wherein the material corresponds to analog video, as taught by Hendricks, for the benefit of enabling a cable provider to include the large number of subscribers with existing analog set top terminals in it's system.

Additionally, it would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Maissel's system to include wherein the material corresponds to MPEG, as taught by Krause, for the typical benefit of enabling a cable provider to save on bandwidth and storage space by compressing the material.

7. Claims 3, 5, 30, 37 and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maissel, in view of Alexander et al. (Alexander) (6,177,931).

As to claims 3 and 42, while Maissel discloses the monitoring of a subscriber's control commands (page 25, lines 4-8), he fails to specifically disclose wherein said monitoring comprises monitoring volume control commands initiated by the subscriber.

In an analogous art, Alexander discloses an EPG using a viewer profile to determine user preferences (column 29, lines 56-67) which monitors volume changes by a viewer (column 28, lines 46-52) for the typical benefit of obtaining specific details (such as volume preferences) in regards to a user to obtain a more accurate user profile (column 29, lines 56-60).

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Maissel's system to include wherein said monitoring comprises monitoring volume control commands initiated by the subscriber, as taught by Alexander, for the typical benefit of enabling a cable television provider to more accurately build a user profile by obtaining specific details of viewers habits, such as volume preferences.

As to claim 5, while Maissel discloses the monitoring of a subscriber's control commands (page 25, lines 4-8), he fails to specifically disclose wherein said monitoring comprises monitoring record signals.

In an analogous art, Alexander discloses an EPG using a viewer profile to determine user preferences (column 29, lines 56-67) which monitors record instructions made by a viewer (column 28, lines 44-46) for the typical benefit of obtaining specific details (such as recorded programming) in regards to a user to obtain a more accurate user profile (column 29, lines 56-67).

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Maissel's system to include wherein said monitoring

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comprises monitoring record signals, as taught by Alexander, for the typical benefit of enabling a cable television provider to more accurately build a user profile by obtaining specific details of viewers habits, such as recording preferences.

As to claim 30, while Maissel discloses a subscriber profile, he fails to specifically disclose wherein the profile is a product preference profile for the subscriber.

In an analogous art, Alexander discloses an EPG processing user characteristics to obtain a viewer profile (column 29, lines 56-67) which includes product preferences (column 30, lines 17-28) for the typical benefit of obtaining information relating to which product advertisements to display for a particular user (column 30, lines 29-44).

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Maissel's system to include wherein the profile is a product preference profile for the subscriber, as taught by Alexander, for the typical benefit allowing the specific targeting of advertisements to cable television users by obtaining information on preferred products.

As to claim 37, while Maissel discloses a subscriber profile, he fails to specifically disclose wherein the subscriber profile is analyzed by a third party for the purposes of marketing and advertising.

In an analogous art, Alexander discloses an EPG which transmits a user profile to advertisers for analysis (column 33, lines 9-15) for the typical benefit of enabling advertisers to customize their marketing (column 33, lines 11-15).

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Maissel's system to include wherein the subscriber profile is analyzed by a third party for the purposes of marketing and advertising, as taught by Alexander, for the typical benefit of enabling advertisers in a cable television system to customize their marketing to the specific habits and tastes of viewers.

8. Claims 18-20, 23, 26-28, 31, 32, 34, 35, 50 and 51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maissel as applied to claims 1, 21 and 40 above, and further in view of Knee.

As to claim 18, while Maissel discloses wherein said processing comprises extracting and storing program characteristics based on the subscriber selection data, he fails to specifically disclose generating one or more program characteristics vectors.

In an analogous art, Knee discloses an EPG (paragraph 17) which will construct a demographic profile for a user (Fig. 2, paragraph 30) by using generated values (or program characteristics vectors) based upon viewer programming selections (Fig. 4; paragraph 36) for the typical benefit of creating a profile which can accurately associate a viewer with various categories (paragraphs 29-30).

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Maissel's system to include generating one or more program characteristics vectors, as taught by Knee, for the benefit of creating a more robust subscriber profile which can associate a viewer with various defined categories.

As to claim 19, Maissel and Knee disclose wherein the program characteristics vectors are one or more values characterizing the source material (See Knee at Fig. 4; paragraph 36).

As to claim 20, while Maissel discloses wherein said processing comprises extracting and storing program characteristics based on the subscriber selection data, he fails to specifically disclose wherein said processing corresponds to an n-dimensional program characteristics matrix comprising one or more program characteristics vectors.

In an analogous art, Knee discloses an EPG (paragraph 17) which will construct a demographic profile for a user (Fig. 2) using an n-dimensional characteristics matrix (Fig. 4; paragraph 36) comprising a plurality of program characteristics vectors (paragraph 30) for the typical benefit of creating a profile which can accurately associate a viewer with various categories (paragraphs 29-30).

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Maissel's system to include wherein said processing corresponds to an n-dimensional program characteristics matrix comprising one or more program characteristics vectors, as taught by Knee, for the benefit of creating a more robust subscriber profile which can associate a viewer with various defined categories.

As to claim 23, while Maissel discloses wherein said processing further comprises processing subscriber selection data based on a pre-determined set of

heuristic rules, he fails to specifically disclose wherein the heuristic rules are expressed as conditional probabilities.

In an analogous art, Knee discloses an EPG (paragraph 17) which will construct a demographic profile for a user (Fig. 2) using heuristic rules which are expressed as conditional probabilities (Fig. 4; paragraph 36) for the typical benefit of creating a profile which can accurately associate a viewer with various categories (paragraphs 29-30).

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Maissel's system to include wherein the heuristic rules are expressed as conditional probabilities, as taught by Knee, for the benefit of creating a more robust subscriber profile which can associate a viewer with various defined categories.

As to claim 26, while Maissel discloses wherein the subscriber belongs to a household (more than one viewer preference profile; page 18, lines 9-17 and page 20, lines 19-27) and the subscriber profile holds household preferences (in a combined profile; page 18, lines 9-17 and page 20, lines 19-27), he fails to specifically disclose wherein the profile is a demographic profile for the user, the demographic profile indicating the probable age, income, gender, and other demographics.

In an analogous art, Knee discloses an EPG (paragraph 17) which will construct a demographic profile for a user (Fig. 2) indicating probable age, income, gender and other demographics (Fig. 2; paragraph 29) for the typical benefit of enabling advertising to be targeted based upon desired demographic groups (paragraph 32).

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Maissel's system to include wherein the profile is a demographic profile for the user, the demographic profile indicating the probable age, income, gender, and other demographics, as taught by Knee, for the typical benefit of enabling cable television advertising to be targeted to specific subscribers based upon desired demographic groups.

As to claim 27, while Maissel discloses wherein the subscriber selection data corresponds to a viewing session (wherein a new viewer first begins a viewing session; page 25, lines 4-8 and page 26, lines 11-16) and the subscriber profile is a session preference profile for a user (page 18, lines 18-30 and page 19, lines 1-8), he fails to specifically disclose wherein the profile is a demographic profile.

In an analogous art, Knee discloses an EPG (paragraph 17) which will construct a demographic profile for a user (Fig. 2; paragraph 29) for the typical benefit of enabling advertising to be targeted based upon desired demographic groups (paragraph 32).

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Maissel's system to include wherein the profile is a demographic profile, as taught by Knee, for the typical benefit of enabling cable television advertising to be targeted to specific subscribers based upon desired demographic groups.

As to claim 28, while Maissel discloses wherein the subscriber selection data corresponds to a plurality of viewing sessions (page 18, lines 18-30 and page 19, lines 1-8), he fails to specifically disclose wherein the subscriber profile is an average demographic profile for the subscriber.

In an analogous art, Knee discloses an EPG (paragraph 17) which will construct a demographic profile for a user (Fig. 2) based upon a weighted average of values associated with user inputs (paragraphs 39-40) for the typical benefit of ensuring accuracy of the profile by utilizing numerous viewer inputs (paragraph 43).

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Maissel's system to include wherein the subscriber profile is an average demographic profile for the subscriber user, as taught by Knee, for the typical benefit of enabling cable television advertising to be targeted to specific subscribers based upon desired demographic groups by utilizing a plurality of viewer of viewer inputs.

As to claims 31 and 50, while Maissel discloses wherein the subscriber belongs to a household (more than one viewer preference profile; page 18, lines 9-17 and page 20, lines 19-27) and the subscriber profile holds household preferences (in a combined profile; page 18, lines 9-17 and page 20, lines 19-27), he fails to specifically disclose wherein the profile comprises demographic data indicating probabilistic measurements of demographics.

In an analogous art, Knee discloses an EPG (paragraph 17) which will construct a profile for a viewer which comprises demographic data (Fig. 2) that indicates probabilistic measurements of demographics (paragraphs 30-31) for the typical benefit of enabling advertising to be targeted based upon desired demographic groups (paragraph 32).

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Maissel's system to include wherein the profile comprises demographic data indicating probabilistic measurements of demographics, as taught by Knee, for the typical benefit of enabling cable television advertising to be targeted to specific subscribers based upon desired demographic groups.

As to claims 32 and 51, while Maissel discloses wherein the subscriber belongs to a household (more than one viewer preference profile; page 18, lines 9-17 and page 20, lines 19-27) and the subscriber profile comprises household program preference information (in a combined profile; page 18, lines 9-17 and page 20, lines 19-27) indicating household program interests (page 18, lines 18-30 and page 19, lines 1-8), he fails to specifically disclose wherein the preference information indicates probabilistic measurements of program interests.

In an analogous art, Knee discloses an EPG (paragraph 17) which will construct a profile for a viewer (Fig. 2) which comprises program preference information indicating probabilistic measurements of program interests (Fig. 2; paragraph 30) for the typical

benefit of enabling advertising to be targeted to a viewer most likely to be interested (paragraphs 46 and 47).

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Maissel's system to include wherein the preference information indicates probabilistic measurements of program interests, as taught by Knee, for the benefit of providing more efficient cable television advertising by targeting advertising to those subscribers most likely to be interested.

As to claim 34, while Maissel discloses wherein the subscriber selection data corresponds to a viewing session (wherein a new viewer first begins a viewing session; page 25, lines 4-8 and page 26, lines 11-16) of the subscriber household (more than one viewer preference profile; page 18, lines 9-17 and page 20, lines 19-27) and the subscriber profile is a session preference profile for the subscriber household (combined profile; page 18, lines 18-30 and page 19, lines 1-8), he fails to specifically disclose wherein the profile is a demographic profile.

In an analogous art, Knee discloses an EPG (paragraph 17) which will construct a demographic profile for a user (Fig. 2; paragraph 29) for the typical benefit of enabling advertising to be targeted based upon desired demographic groups (paragraph 32).

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Maissel's system to include wherein the profile is a demographic profile, as taught by Knee, for the typical benefit of enabling cable

television advertising to be targeted to specific subscribers based upon desired demographic groups.

As to claim 35, while Maissel discloses wherein the subscriber selection data corresponds to a plurality of viewing sessions (page 18, lines 18-30 and page 19, lines 1-8) and the subscriber profile is a profile for a subscriber household (more than one viewer preference profile; page 18, lines 9-17 and page 20, lines 19-27), he fails to specifically disclose wherein the subscriber profile is an average demographic profile for the subscriber.

In an analogous art, Knee discloses an EPG (paragraph 17) which will construct a demographic profile for a user (paragraphs 34-36) based upon a weighted average of values associated with user inputs (paragraphs 39-40) for the typical benefit of ensuring accuracy of the profile by utilizing numerous viewer inputs (paragraph 43).

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Maissel's system to include wherein the subscriber profile is an average demographic profile for the subscriber user, as taught by Knee, for the benefit of ensuring the accuracy of a cable television subscriber's profile by utilizing a plurality of viewer inputs.

9. Claims 33 and 52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maissel as applied to claims 1 and 40 above, and further in view of Knee and Alexander.

As to claims 33 and 52, while Maissel discloses wherein the subscriber belongs to a household (more than one viewer preference profile; page 18, lines 9-17 and page 20, lines 19-27) and the subscriber profile comprises household preference information (in a combined profile; page 18, lines 9-17 and page 20, lines 19-27) indicating household interests (program preferences; page 18, lines 18-30 and page 19, lines 1-8), he fails to specifically disclose wherein the profile contains probabilistic measurements of household product interests.

In an analogous art, Knee discloses an EPG (paragraph 17) which will construct a profile for a viewer (Fig. 2) which comprises preference information indicating probabilistic measurements of interests (Fig. 2; paragraph 30) for the typical benefit of enabling advertising to be targeted to a viewer most likely to be interested (paragraphs 46 and 47).

Additionally, in an analogous art, Alexander discloses an EPG processing user characteristics to obtain a viewer profile (column 29, lines 56-67) which includes product preferences (column 30, lines 17-28) for the typical benefit of obtaining information relating to which product advertisements to display for a particular user (column 30, lines 29-44).

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Maissel's system to include wherein the preference information indicates probabilistic measurements of interests, as taught by Knee, for the benefit of providing more efficient cable television advertising by targeting advertising to those subscribers most likely to be interested.

Additionally, It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Maissel and Knee's system to include wherein the profile is a product preference profile for the subscriber, as taught by Alexander, for the benefit of obtaining information to accurately determine product advertisements to display for a particular user of the cable television system.

10. Claims 16, 17, 48 and 49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maissel as applied to claim 1 above, and further in view of Lawler (5,758,259).

As to claims 16 and 48, while Maissel discloses wherein said evaluating comprises evaluating viewing times and filtering out any viewing periods that are less than a certain threshold (page 26, lines 23-30), he fails to disclose filtering viewing periods in which no user activity has been received within a pre-determined period of time.

In an analogous art, Lawler discloses an EPG which builds a viewer preference table based upon user viewing activities (column 2, lines 20-37) which will stop keeping track of viewed programming if a user entry is not received in a certain time frame (column 10, lines 11-19) for the typical benefit improving the accuracy of the stored viewing history (column 10, lines 11-14).

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Maissel's system to include filtering viewing periods in which no user activity has been received within a pre-determined period of time, as

taught by Lawler, for the benefit of ensuring that a stored viewing history of a cable television viewer is as accurate as possible.

As to claim 17, Maissel and Lawler disclose wherein the filtered out viewing periods correspond to dead periods implying that the subscriber is not actively watching the television or multimedia programming (wherein the subscriber is not present; See Lawler at column 10, lines 11-19).

As to claim 49, Maissel and Lawler disclose the same subject matter for the same reasons as described in the rejection of claim 16.

11. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Maissel as applied to claim 8 above, and further in view of Goldman et al. (Goldman) (US2003/0135853).

As to claim 10, while Maissel discloses wherein source related text is extracted from the source material, he fails to specifically disclose wherein the related text is extracted from the closed captioning information.

In an analogous art, Goldman discloses an EPG monitors a user's viewing habits which are stored in a user profile (paragraph 13) wherein keywords are extracted from closed captioning information to determine the subject matter of viewed programming (paragraph 62) for the typical benefit of enabling closed caption information to be used

to determine the programming interests of a viewer (paragraph 63, lines 12-16 and paragraph 61).

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Maissel's system to include wherein the related text is extracted from the closed captioning information, as taught by Goldman, for the benefit of enabling a cable television provider to use closed caption information to better determine the programming interests of a viewer.

12. Claim 38 is rejected under 35 U.S.C. 103(a) as being unpatentable over Maissel as applied to claim 1 above, and further in view of Herz (6,029,195).

As to claim 38, while Maissel discloses the storing of a subscriber profile, he fails to disclose wherein access to the subscriber profile is limited to a selected number of other parties.

In an analogous art, Herz discloses a communication system using a viewer profile to identify electronic media of interest to the viewer (column 5, lines 21-30) wherein the viewer controls the number of outside advertisers who have access to the profile (column 5, lines 52-61) for the typical benefit of ensuring the protection of a viewer's privacy (column 5, lines 40-52).

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Maissel's system to include wherein access to the subscriber profile is limited to a selected number of other parties, as taught by Herz, for

the common benefit of ensuring that personal information about a cable television viewer is protected.

Conclusion

13. The following are suggested formats for either a Certificate of Mailing or Certificate of Transmission under 37 CFR 1.8(a). The certification may be included with all correspondence concerning this application or proceeding to establish a date of mailing or transmission under 37 CFR 1.8(a). Proper use of this procedure will result in such communication being considered as timely if the established date is within the required period for reply. The Certificate should be signed by the individual actually depositing or transmitting the correspondence or by an individual who, upon information and belief, expects the correspondence to be mailed or transmitted in the normal course of business by another no later than the date indicated.

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Please refer to 37 CFR 1.6(d) and 1.8(a)(2) for filing limitations concerning facsimile transmissions and mailing, respectively.


14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to James Sheleheda whose telephone number is (703) 305-8722. The examiner can normally be reached on 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the primary examiner, Chris Grant can be reached on (703) 305-4755. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Patent Examiner
Art Unit 2614

JS


CHRIS GRANT
PRIMARY EXAMINER